REMARKS/ARGUMENTS

Claims 1-16, 18-26, and 28-31 are currently pending in the present patent application.

In the Final Office Action, claims 1-16, 18-26, and 31 were indicated as allowed, but in Section 4 the action the Examiner objects to claims 1-16 and 28-31 because of several informalities. Applicants thank the Examiner for his comments, and have amended claims 1-16 and 28-31 pursuant to the Examiner's comments. Claims 1-16, 18-26, and 31 are accordingly properly allowable as indicated by the Examiner.

In Section 3 of the Final Office Action, the Examiner objects to the drawings as failing to comply with 37 CFR § 1.84(p)(5) because they do not include the following reference sign mentioned in the description, namely, "bias terminal TP", and because the drawings include the following reference character mentioned in the description, namely, "Ipolar". With regard to the comments that the drawings failed to include the reference sign "bias terminal TP" the examiner is referred to Figure 7 of the previously filed replacement sheets where this reference sign is indeed contained in this figure. Similarly, with regard to the Examiner's comments that the reference sign Ipolar is contained in the figures but not mentioned in the description of the present application, the Examiner is referred to paragraph 66 of the present application which indeed does include this reference sign.

For these reasons, the Examiner's objections to the drawings should be withdrawn. Note that notwithstanding this fact amended drawings accompany this response as replacement sheets. The only change in these figures versus the previously submitted replacement sheets is that Figure 6 has been amended to include the reference sign "TP" so that this reference sign appropriately appears in this figure along with Figure 7 as mentioned above.

In Section 2 of the Final Office Action, the Examiner objects to the amendment filed on August 26, 2008, under 35 USC § 132(a) because it introduces new matter

into the disclosure. The Examiner states that the added material which is not supported by the original disclosure is "the noisy digital input signals having a substantially constant frequency" recited in claim 28. The Examiner states that the new matter must be cancelled in this amendment and response. In addition, the Examiner rejects claims 28-30 under 35 USC § 112, first paragraph, as failing to comply with the written description requirement. The Examiner alleges that the claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. The Examiner contends that the newly added limitation "the noisy digital input signals having a substantially constant frequency" recited in claim 28 is not supported by the original specification, and thus the above limitation introduces new matter to claims 28-30.

Claim 28 has been amended to recite, in part, a method of reducing noise on noisy digital input signals that includes receiving the noisy digital input signals. Thus, the prior limitation “the noisy digital input signals having a substantially constant frequency” has been removed from this claim pursuant to the Examiner’s request. Please note, however, that although this limitation has been removed the undersigned does not agree that it introduced new matter into the application and that this limitation is implicit in the recitation of the phrase “digital input signals.” When an electrical signal is discussed the frequency of that signal is assumed not to be very unless, of course, such a varying frequency is important within the context of a circuit in which that signal is being generated or utilized. This does not mean that such as signal cannot have a different frequency or that the frequency of the signal is set permanently at one given value, but that when a given value for the frequency of the signal is selected this frequency does not vary over time during operation of the circuit in which the signal is being generated or utilized.

The limitation of the digital input signals having “a substantially constant frequency” was thus made to expressly recite what is already implicit in the claim

language. Moreover, this limitation was added to clearly illustrate this difference between the recited operations in claim 28 and the Toda patent. As previously discussed, Toda relates to a voltage-to-frequency converter which is directed to the processing of “analog” signals in order to change their frequency values through voltage control. Conversely, the present application generally and claim 28 specifically relates to a method of reducing the noise on noisy digital input signals. In Toda the voltage-to-frequency converter operates on analog signals having varying frequencies and not on digital signals.

Furthermore, the Examiner has not shown that the Ricon-Mora patent teaches that it is known that a hysteresis circuit can have a digital input signal. For this teaching, the Examiner points to column 2, lines 39-45 of the Ricon-Mora patent. This description, however, has nothing to do with a hysteresis circuit accepting digital inputs but instead has to do with "a digitally controlled hysteresis network to select the value of the hysteresis determining components" for the network. The purpose of the described control is to allow a user to select, using digital signals, the hysteresis value from among a finite number of choices dictated or controlled by digital inputs supplied to the hysteresis network. These are digital inputs utilized to select the hysteresis value of the hysteresis network and are not digital inputs provided as inputs to a hysteresis circuit of the network. In other words, the digital inputs are utilized to select the hysteresis value of the network and are not being input to the network to be operated on and an output generated therefrom by the network. Lines 47-49 illustrate this fact where the example is given of a two-bit word utilized to determine the hysteretic settings and thereby program the hysteresis network.

Furthermore, it should be noted that the Examiner has provided no sufficient rationale as to why one would combine Toda and Ricon-Mora. The Examiner states that one skilled in the art would have combined these two patents "for the purpose of yielding high speed accuracy." The undersigned is unclear as to what the Examiner means by this comment. How does utilization of a digital signal yield high speed

accuracy versus the use of an analog signal? Accuracy of what? In fact, Toda is directed to a voltage-to-frequency converter that generates an output signal having a desired frequency and presumably a variable frequency range is desired in such a converter, for use say in frequency modulation circuits. If a digital input signal is utilized, such a voltage-to-frequency converter is limited to only two frequencies and in this sense it appears the combination of Toda and Ricon-Mora suggested by the Examiner renders the Toda converter unusable for its intended purpose. Moreover, such a combined circuit could be said to actually reduce the accuracy of the output signal from the voltage-to-frequency converter since a desired range of output frequencies would have to be approximated only two different frequencies.

For at least these reasons, the combination of elements recited in claim 28 is allowable. Dependent claim 29 depends from claim 28 and is therefore allowable for at least the same reasons as claim 28 and due to the additional limitations added by this dependent claim. Dependent claim 30 also depends from claim 28 and is accordingly allowable for at least the same reasons as claim 28 and due to the additional limitations added by this dependent claim.

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The present patent application is in condition for allowance. Favorable consideration and a Notice of Allowance are respectfully requested. **Should the Examiner have any further questions about the application, Applicants respectfully request the Examiner to contact the undersigned attorney at (425) 455-5575 to arrange for a telephone interview to discuss the outstanding issues.** If the need for any fee in addition to any fee paid with this response is found, for any reason or at any point during the prosecution of this application, kindly consider this a petition therefore and charge any necessary fees to Deposit Account 07-1897.

Respectfully submitted,

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